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EXAMINER

PIZIALI, ANDREW T

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/761,765

Applicant(s)

ANDERSON ET AL.

Examiner

Andrew T Piziali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10/4/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 26-34 and 36-49 is/are pending in the application.
- 4a) Of the above claim(s) 36 and 37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-34 and 38-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment filed on 10/4/04 has been entered. The 35 USC 112 rejection has been withdrawn due to the amendment to claim 26 and the cancellation of claim 35.

### ***Election/Restrictions***

2. As indicated in the previous Office Action, claims 36 and 37 have been withdrawn from consideration as being directed to a non-elected invention. Because applicant did not distinctly and specifically point out the supposed errors in the restriction by original presentation, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 26-31, 33-34, 38-39 and 44-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Publication No. 63-131101 to Yoshihiro et al. (hereinafter referred to as Yoshihiro).

Regarding claims 26-31, 33-34, 38-39 and 44-49, Yoshihiro discloses a transparent substrate having at least one surface comprising an antireflection coating made of a multilayer stack having alternating thin layers of high and low refractive indices comprising at least one high-index thin multilayer (14a and 14b) having a refractive index value higher than 1.9 and lower than 2.45 comprising at least one titanium oxide layer (14b) and at least one additional

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layer (14a) having a refractive index of 1.9 to 2.2, and low refractive index layers (13 and 15) having a refractive index of from 1.30 and 1.65 (see entire document including Patent Abstract and page 6).

Yoshihiro discloses that the at least one additional layer (14a) having a refractive index of 1.9 to 2.2 may be tin oxide, antimony oxide, a mixture, or the like (see page 16), but Yoshihiro does not specifically mention the use antimony-doped tin oxide. Considering that antimony-doped tin oxide is a mixture of tin oxide and antimony oxide, and considering that Yoshihiro discloses that a mixture of antimony oxide and tin oxide may be used for layer (14a), it would have been obvious to one having ordinary skill in the art at the time the invention was made to make layer (14a) from any suitable high refractive index material, such as antimony-doped tin oxide, because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability.

Regarding claim 27, Yoshihiro discloses that the high-index multilayer may have a refractive index ranging from 2.25 to 2.38 (page 6).

Regarding claim 28, Yoshihiro discloses that the thin layers may comprise dielectric materials such as titanium oxide (Patent Abstract).

Regarding claim 29, Yoshihiro discloses that the titanium oxide layer and the additional high index layer are contiguous layers and the additional high index layer is closer to the substrate than the titanium oxide layer (Patent Abstract Figure).

Regarding claim 30, Yoshihiro discloses that the absolute value of the difference between the refractive index of the additional high index layer less the refractive index of the first titanium oxide layer may be from 0.1 and 0.6 (page 6).

Regarding claim 31, Yoshihiro discloses that the low refractive index thin layers may comprise at least one of silicon oxide and aluminum oxide (page 6).

Regarding claim 33, Yoshihiro discloses that the low refractive index layer may comprise a mixture of  $\text{SiO}_2$  and  $\text{Al}_2\text{O}_3$ , but does not specifically mention any specific atomic ratios (page 6). It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the atomic ratio of  $\text{SiO}_2$  and  $\text{Al}_2\text{O}_3$ , because it is understood by one of ordinary skill in the art that the atomic ratio determines properties such as the refractive index of the material and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Regarding claim 34, Yoshihiro discloses that the antireflection coating may have a formula (high-index layer/low-index layer) $n$ , wherein  $n$  is 2 or 3 (Patent Abstract).

Regarding claim 38, Yoshihiro discloses that the transparent substrate may comprise a high index layer distinct from the high-index multilayer, having a refractive index of between 1.9 and 2.2 which comprises tantalum oxide, zirconium oxide, tin oxide, or indium oxide (page 6).

Regarding claim 39, Yoshihiro discloses that the transparent substrate may be used as a glazing (page 2).

Regarding claims 44 and 47, Yoshihiro discloses that the substrate may be used on a display screen (page 2).

Regarding claims 44 and 48-49, Yoshihiro discloses that the substrate may be used as a glazing on glass (Patent Abstract).

Regarding claims 45-49, Yoshihiro discloses that the substrate may be used as a glazing on glass (Patent Abstract), but does not specifically mention using the substrate as a mirror. It

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would have been obvious to one having ordinary skill in the art at the time the invention was made to use the substrate in any application desiring the characteristics taught by Yoshihiro, because it is within the general skill of a worker to use the substrate in any application desiring the taught characteristics.

5. Claims 26-31, 33-34, 38-39 and 44-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Publication No. 63-131101 to Yoshihiro in view of USPN 6,436,541 to Sopko et al. (hereinafter referred to as Sopko).

Regarding claims 26-31, 33-35, 38-39 and 44-49, Yoshihiro discloses a transparent substrate having at least one surface comprising an antireflection coating made of a multilayer stack having alternating thin layers of high and low refractive indices comprising at least one high-index thin multilayer (14a and 14b) having a refractive index value higher than 1.9 and lower than 2.45 comprising at least one titanium oxide layer (14b) and at least one additional layer (14a) having a refractive index of 1.9 to 2.2, and low refractive index layers (13 and 15) having a refractive index of from 1.30 and 1.65 (see entire document including Patent Abstract and page 6).

Yoshihiro discloses that the at least one additional layer (14a) having a refractive index of 1.9 to 2.2 may be tin oxide, antimony oxide, a mixture, or the like (see page 16), but Yoshihiro does not specifically mention the use of antimony-doped tin oxide, fluorine-doped tin oxide, or aluminum-doped zinc oxide. Sopko discloses that it is known in the art to use antimony-doped tin oxide, fluorine-doped tin oxide, or aluminum-doped zinc oxide as a high refractive index material in a high/low refractive index stack (see entire document including column 4, lines 27-52). Sopko also discloses that it is known that these materials provide anti-static and

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electromagnetic shielding properties (column 2, lines 19-25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make layer (14a) from any suitable high refractive index material, such as antimony-doped tin oxide, fluorine-doped tin oxide, or aluminum-doped zinc oxide, because such materials would provide the article of Yoshihiro with anti-static and electromagnetic shielding properties and because it is within the general skill of a worker in the art to select a known material on the basis of its suitability.

Regarding claim 27, Yoshihiro discloses that the high-index multilayer may have a refractive index ranging from 2.25 to 2.38 (page 6).

Regarding claim 28, Yoshihiro discloses that the thin layers may comprise dielectric materials such as titanium oxide (Patent Abstract).

Regarding claim 29, Yoshihiro discloses that the titanium oxide layer and the additional high index layer are contiguous layers and the additional high index layer is closer to the substrate than the titanium oxide layer (Patent Abstract Figure).

Regarding claim 30, Yoshihiro discloses that the absolute value of the difference between the refractive index of the additional high index layer less the refractive index of the first titanium oxide layer may be from 0.1 and 0.6 (page 6).

Regarding claim 31, Yoshihiro discloses that the low refractive index thin layers may comprise at least one of silicon oxide and aluminum oxide (page 6).

Regarding claim 33, Yoshihiro discloses that the low refractive index layer may comprise a mixture of  $\text{SiO}_2$  and  $\text{Al}_2\text{O}_3$ , but does not specifically mention any specific atomic ratios (page 6). It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the atomic ratio of  $\text{SiO}_2$  and  $\text{Al}_2\text{O}_3$ , because it is understood by one of

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ordinary skill in the art that the atomic ratio determines properties such as the refractive index of the material and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Regarding claim 34, Yoshihiro discloses that the antireflection coating may have a formula (high-index layer/low-index layer) $n$ , wherein  $n$  is 2 or 3 (Patent Abstract).

Regarding claim 38, Yoshihiro discloses that the transparent substrate may comprise a high index layer distinct from the high-index multilayer, having a refractive index of between 1.9 and 2.2 which comprises tantalum oxide, zirconium oxide, tin oxide, or indium oxide (page 6).

Regarding claim 39, Yoshihiro discloses that the transparent substrate may be used as a glazing (page 2).

Regarding claims 44 and 47, Yoshihiro discloses that the substrate may be used on a display screen (page 2).

Regarding claims 44 and 48-49, Yoshihiro discloses that the substrate may be used as a glazing on glass (Patent Abstract).

Regarding claims 45-49, Yoshihiro discloses that the substrate may be used as a glazing on glass (Patent Abstract), but does not specifically mention using the substrate as a mirror. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the substrate in any application desiring the characteristics taught by Yoshihiro, because it is within the general skill of a worker to use the substrate in any application desiring the taught characteristics.



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6. Claims 26-31, 34, 38-39 and 44-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Publication No. 60-081047 to Tatsuo et al. (hereinafter referred to as Tatsuo) in view of USPN 6,436,541 to Sopko.

Regarding claims 26-31, 34, 38-39 and 44-49, Tatsuo discloses a transparent substrate having at least one surface comprising an antireflection coating made of a multilayer stack having alternating thin layers of high and low refractive indices comprising at least one high-index thin multilayer (2a and 3a) having a refractive index value higher than 1.9 and lower than 2.45 comprising at least one titanium oxide layer (3a) and at least one additional layer (2a) having a refractive index of at most 2.3, such as an indium-doped tin oxide layer (slightly conducting material), and low refractive index layers (3b) having a refractive index of from 1.30 and 1.65 (see entire document including Patent Abstract).

Tatsuo discloses that the at least one additional layer (2a) is an electrically conductive transparent thin film capable of electromagnetic shielding (see abstract). Tatsuo discloses that the layer (2a) may be indium-doped tin oxide, but Tatsuo does not specifically mention the use of antimony-doped tin oxide, fluorine-doped tin oxide, or aluminum-doped zinc oxide. Sopko discloses that it is known in the art to use indium-doped tin oxide, antimony-doped tin oxide, fluorine-doped tin oxide, or aluminum-doped zinc oxide as a high refractive index material in a high/low refractive index stack (see entire document including column 4, lines 27-52). Sopko also discloses that it is known that these materials provide anti-static and electromagnetic shielding properties (column 2, lines 19-25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make layer (2a) from any suitable high refractive index material, such as antimony-doped tin oxide, fluorine-doped tin oxide, or

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aluminum-doped zinc oxide, because such materials would provide the article of Tatsuo with anti-static and electromagnetic shielding properties and because it is within the general skill of a worker in the art to select a known material on the basis of its suitability.

Regarding claim 27, Tatsuo discloses that the high-index multilayer may have a refractive index ranging from 2.25 to 2.38 (see entire document).

Regarding claim 28, Tatsuo discloses that the thin layers may comprise dielectric materials such as titanium oxide (Patent Abstract).

Regarding claim 29, Tatsuo discloses that the titanium oxide layer and the additional high index layer are contiguous layers and the additional high index layer is closer to the substrate than the titanium oxide layer (Patent Abstract Figure).

Regarding claim 30, Tatsuo discloses that the absolute value of the difference between the refractive index of the additional high index layer less the refractive index of the first titanium oxide layer may be from 0.1 and 0.6 (see entire document).

Regarding claim 31, Tatsuo discloses that the low refractive index thin layers may comprise at least one of silicon oxide and aluminum oxide (Patent Abstract).

Regarding claim 34, Tatsuo discloses that the antireflection coating may have a formula  $(\text{high-index layer/low-index layer})_n$ , wherein  $n$  is 2 or 3 (Patent Abstract).

Regarding claim 38, Tatsuo discloses that the transparent substrate may comprise a high index layer distinct from the high-index multilayer, having a refractive index of between 1.9 and 2.2 which may comprise zirconium oxide (page 234).

Regarding claim 39, Tatsuo discloses that the transparent substrate may be used as a glazing (page 233).

Regarding claims 44-45 and 48-49, Yoshihiro discloses that the substrate may be used on a motor vehicle window, a shop window, or a glass (page 233).

Regarding claims 45-49, Tatsuo discloses that the substrate may be used as a motor vehicle window, a shop window, or a glass (page 233), but does not specifically mention using the substrate as a mirror. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the substrate in any application desiring the characteristics taught by Tatsuo, because it is within the general skill of a worker to use the substrate in any application desiring the taught characteristics.

7. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Publication No. 63-131101 to Yoshihiro as applied to claims 26-31, 33-34, 38-39 and 44-49 above, and further in view of either USPN 5,332,618 to Austin or USPN 5,719,705 to Machol.

Yoshihiro discloses that the low refractive index thin layers may comprise at least one of silicon oxide and aluminum oxide (page 6), but does not specifically mention the use of halogenated oxides. Austin (column 8, line 46 through column 9, line 15) and Machol (column 4, lines 46-65) each disclose that it is known in the art to use silicon oxide and/or aluminum oxyfluoride as a low refractive index material in an alternating high/low/high/low transparent substrate. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the low refractive index layers from any suitable low refractive index material, such as silicon oxide and/or aluminum oxyfluoride, as taught by Austin and Machol, because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.

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8. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Publication No. 63-131101 to Yoshihiro in view of USPN 6,436,541 to Sopko as applied to claims 26-31, 33-34, 38-39 and 44-49 above, and further in view of either USPN 5,332,618 to Austin or USPN 5,719,705 to Machol.

Yoshihiro discloses that the low refractive index thin layers may comprise at least one of silicon oxide and aluminum oxide (page 6), but does not specifically mention the use of halogenated oxides. Austin (column 8, line 46 through column 9, line 15) and Machol (column 4, lines 46-65) each disclose that it is known in the art to use silicon oxide and/or aluminum oxyfluoride as a low refractive index material in an alternating high/low/high/low transparent substrate. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the low refractive index layers from any suitable low refractive index material, such as silicon oxide and/or aluminum oxyfluoride, as taught by Austin and Machol, because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.

9. Claims 40-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Publication No. 63-131101 to Yoshihiro as applied to claims 26-31, 33-34, 38-39 and 44-49 above, and further in view of USPN 5,073,451 to Iida et al. (hereinafter referred to as Iida).

Regarding claims 40-45, Iida discloses that a 4-layer high-low-high-low glass article may further include silver films and thereby exhibit electromagnetic shielding effects (column 6, lines 1-9). Iida also discloses that such a multilayer coating may be used as a vehicle windshield or a rear window glass by lamination with an uncoated transparent glass plate using any suitable plastic interlayer such as polyvinyl butryal (column 4, lines 4-53). It would have been obvious to

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one having ordinary skill in the art at the time the invention was made to make the antireflection coating of Yoshihiro include one or more silver films and/or any suitable plastic interlayer, as disclosed by Iida, because the article could then exhibit electromagnetic shielding effects and/or could be used as a vehicle windshield or a rear window glass.

Regarding claim 41, Iida discloses that the glass plate of a 4-layer high-low-high-low glass article may be either colorless or colored and that the glass may be curved (column 5, lines 44-56). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the glass of Yoshihiro colorless, colored and/or curved, as disclosed by Iida, because the material selection depends on the intended use and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.

10. Claims 40-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Publication No. 63-131101 to Yoshihiro in view of USPN 6,436,541 to Sopko as applied to claims 26-31, 33-34, 38-39 and 44-49 above, and further in view of USPN 5,073,451 to Iida.

Regarding claims 40-45, Iida discloses that a 4-layer high-low-high-low glass article may further include silver films and thereby exhibit electromagnetic shielding effects (column 6, lines 1-9). Iida also discloses that such a multilayer coating may be used as a vehicle windshield or a rear window glass by lamination with an uncoated transparent glass plate using any suitable plastic interlayer such as polyvinyl butryal (column 4, lines 4-53). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the antireflection coating of Yoshihiro include one or more silver films and/or any suitable plastic interlayer, as

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disclosed by Iida, because the article could then exhibit electromagnetic shielding effects and/or could be used as a vehicle windshield or a rear window glass.

Regarding claim 41, Iida discloses that the glass plate of a 4-layer high-low-high-low glass article may be either colorless or colored and that the glass may be curved (column 5, lines 44-56). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the glass of Yoshihiro colorless, colored and/or curved, as disclosed by Iida, because the material selection depends on the intended use and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.

11. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Publication No. 60-081047 to Tatsuo in view of USPN 6,436,541 to Sopko as applied to claims 26-31, 34, 38-39 and 44-49 above, and further in view of either USPN 5,332,618 to Austin or USPN 5,719,705 to Machol.

Tatsuo discloses that the low refractive index thin layers may comprise at least one of silicon oxide and aluminum oxide (Patent Abstract), but does not specifically mention the use of halogenated oxides. Austin (column 8, line 46 through column 9, line 15) and Machol (column 4, lines 46-65) each disclose that it is known in the art to use silicon oxide and/or aluminum oxyfluoride as a low refractive index material in an alternating high/low/high/low transparent substrate. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the low refractive index layers from any suitable low refractive index material, such as silicon oxide and/or aluminum oxyfluoride, as taught by Austin and

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Machol, because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.

12. Claims 33 and 40-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Publication No. 60-081047 to Tatsuo in view of USPN 6,436,541 to Sopko as applied to claims 26-31, 34, 38-39 and 44-49 above, and further in view of USPN 5,073,451 to Iida.

Regarding claim 33, Tatsuo does not specifically mention using a mixture of  $\text{SiO}_2$  and  $\text{Al}_2\text{O}_3$  for the low refractive index layers, but Iida discloses that it is known in the art to make low refractive index layers out of a mixture of  $\text{SiO}_2$  and  $\text{Al}_2\text{O}_3$  (column 7, lines 1-23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the low refractive index layers from any suitable low refractive index material, such as a mixture of  $\text{SiO}_2$  and  $\text{Al}_2\text{O}_3$ , as taught by Iida, because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.

Iida does not specifically mention any specific atomic ratios. It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the atomic ratio of  $\text{SiO}_2$  and  $\text{Al}_2\text{O}_3$ , because it is understood by one of ordinary skill in the art that the atomic ratio determines properties such as the refractive index of the material and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Regarding claims 40-45, Iida discloses that a 4-layer high-low-high-low glass article may further include silver films and thereby exhibit electromagnetic shielding effects (column 6, lines

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1-9). Iida also discloses that such a multilayer coating may be used as a vehicle windshield or a rear window glass by lamination with an uncoated transparent glass plate using any suitable plastic interlayer such as polyvinyl butryal (column 4, lines 4-53). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the antireflection coating of Tatsuo include one or more silver films and/or any suitable plastic interlayer, as disclosed by Iida, because the article could then exhibit electromagnetic shielding effects and/or could be used as a vehicle windshield or a rear window glass.

Regarding claim 41, Iida discloses that the glass plate of a 4-layer high-low-high-low glass article may be either colorless or colored and that the glass may be curved (column 5, lines 44-56). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the glass of Tatsuo colorless, colored and/or curved, as disclosed by Iida, because the material selection depends on the intended use and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.

### ***Response to Arguments***

13. Applicant's arguments have been considered but are moot in view of the new grounds of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

atp

*g-β 10/15/04*  
ANDREW T. PIZIALI  
PATENT EXAMINER

*Terrel Morris*  
TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700